STG01
EN
VERSION

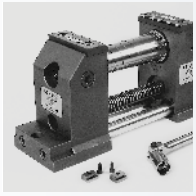
MODULAR CLAMPING SYSTEMS

5-Axis Workholding

www.omlspa.it

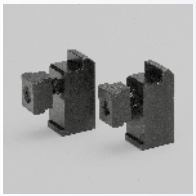
GENIUS & SinterGrip

Precision vise for 5 axis machine tools



GENIUS & SinterGrip

Page 5.3.5



GENIUS
Accessories

Page 5.3.6

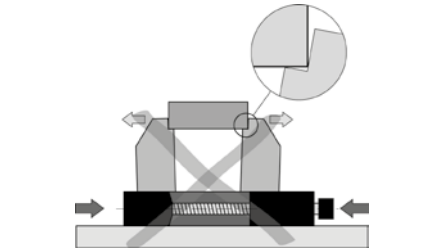
GENIUS
Spare parts

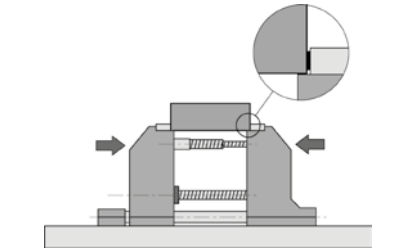
Page 5.3.10

"GENIUS" & SinterGrip

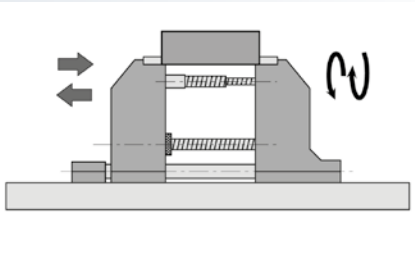
MAIN FEATURES

1 The clamping force (up to 40 kN) is generated right where it is needed: at the part.

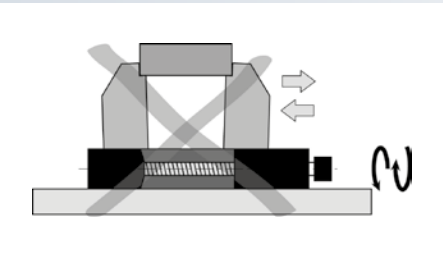


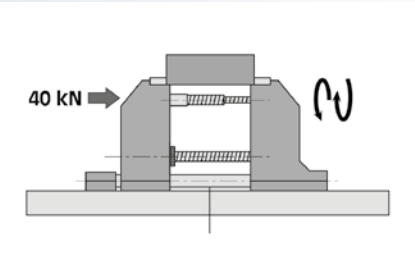


2 Thanks to its own expanding screw, GENIUS can clamp workpieces up to 200 mm with just one set-up.

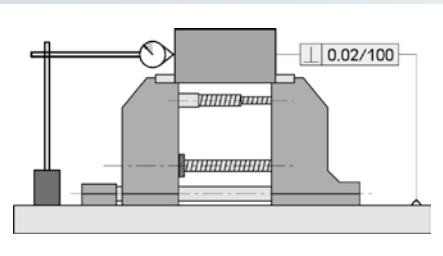


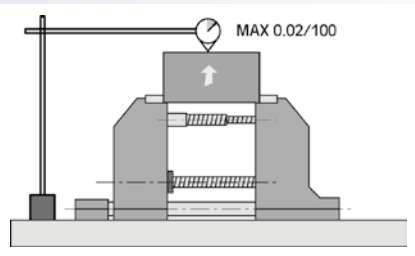
3 Unlike traditional vises, GENIUS clamps the workpieces by means of traction clamping.



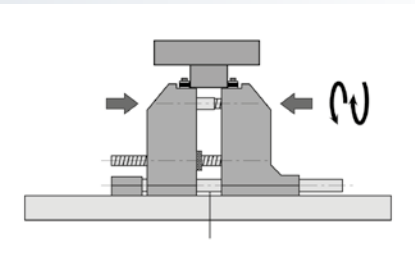


4 GENIUS is the first vise designed for 5 axis-machine tools that can be used for high precision milling operations.





5 The movement of the jaws is not on a base, but on hardened and ground shafts.
This allows for quicker and more accurate positioning of both the same axis with the centre of the machine tool pallet.



"GENIUS" & SinterGrip

Precision vise for 5 axis machine tools

SinterGrip

Our new patented product **SinterGrip** is born to satisfy the current need to clamp a workpiece for very few millimeters (with SinterGrip 3,5 mm clamping surface), and this for the following reasons:

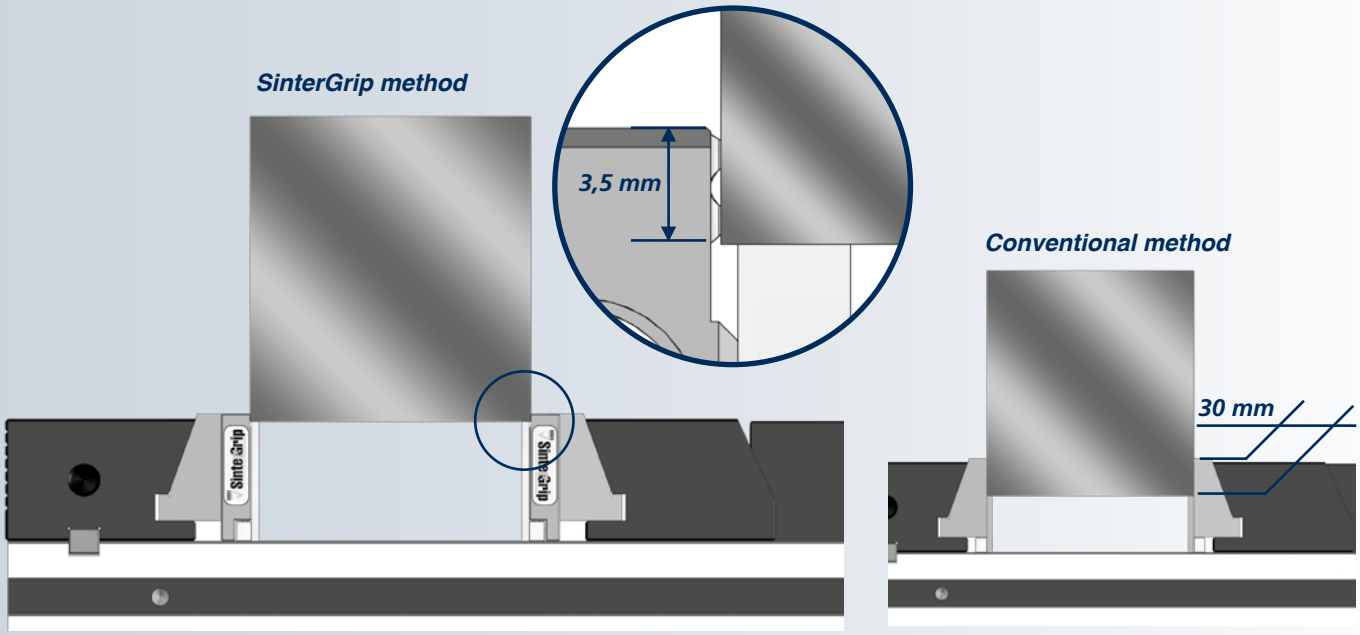
1) In order to machine the workpiece completely in a single operation (especially for 5 axis machines);

2) In order to save money for the raw materials, especially when they have a big impact on the price (aluminum, titanium, etc.)

Indirectly to these reasons, and in order to improve the performance of the machine tool and the tools

higher cutting speed + higher feed rate =
bigger volume of metal removed =
less time to machine the workpiece

the market requires safe clamping, which could at the same time possibly avoid the deformations of the piece itself.



Only 3,5 mm clamping surface, no need of pre-machining the workpiece, clamping stability, higher cutting rate: **SinterGrip** brings only advantages compared to the traditional systems.

On the contrary, traditional systems need, for the clamping of the workpiece, a bigger clamping surface, with the result of waste of raw materials and greater possibility of deformation of the workpiece.

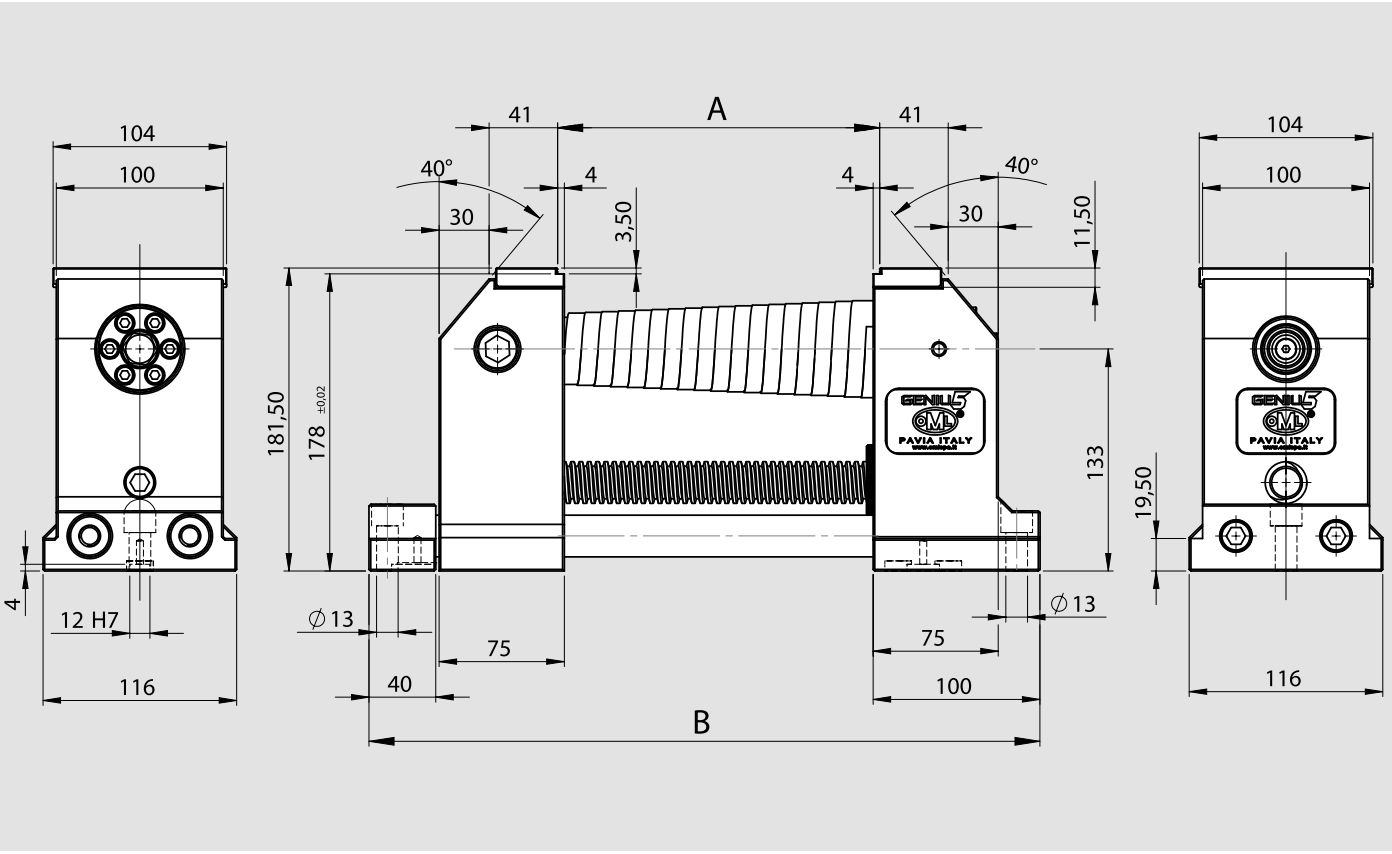
GENIUS & SINTERGRIP

GENIUS vise

supplied with:

- Wrench
- Pair of positioning keys
- SinterGrip inserts for steel*
- Work stop

* on request SinterGrip inserts HRC or ALU



type	Id. No.	A*	B	Weight
GENIUS 100	77585011	100	321	23 Kg
GENIUS 200	77585012	200	412	25 Kg

***** Special opening "A" upon request

Special applications upon request

WORK STOP

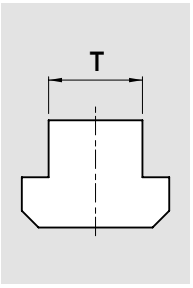
Id. No.
58505000

PAIR OF SMOOTH/GROOVED JAWS

Id. No.
58504119

PAIR OF CLAMPS

complete with screw and T-nuts



Id. No.					
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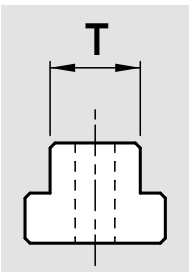
58022792	58022793	58022794	58022795	58022796	58022797

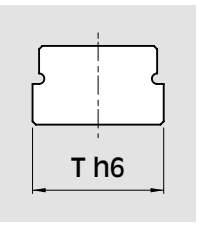
PAIR OF NUTS

complete with screws M12



Id. No.				
T mm 14	**T** mm 16	**T** mm 18	**T** mm 20	**T** mm 22
58502593	58502594	58502595	58502596	58502597

PAIR OF POSITIONING KEY



Id. No.					
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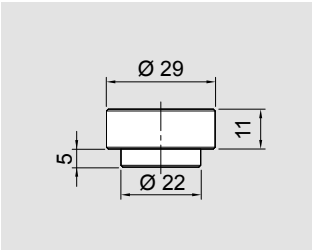
58011592	58011593	58011594	58011595	58011596	58011597

TORQUE WRENCH

Id. No.
51501006

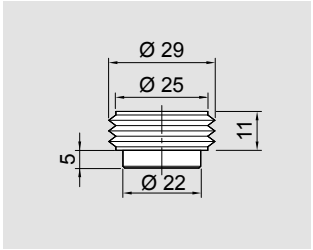
SET OF 4 “GRIPPERS” H11 SMOOTH

Id. No.
58906114



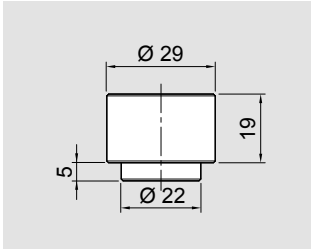
SET OF 4 “GRIPPERS” H11 SERRATED

Id. No.
58906124



SET OF 4 “GRIPPERS” H19 SMOOTH

Id. No.
58906214



SET OF 4 “GRIPPERS” H19 SERRATED

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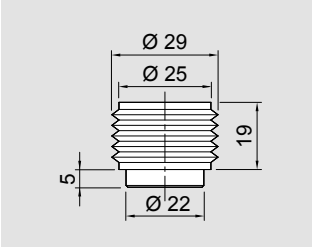
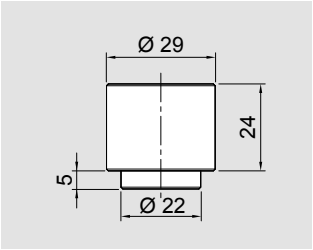


SET OF 4 “GRIPPERS” H24 SMOOTH

Id. No.
58906314



SET OF 4 “GRIPPERS” H24 SERRATED

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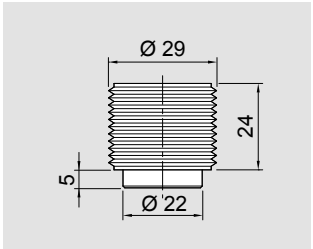
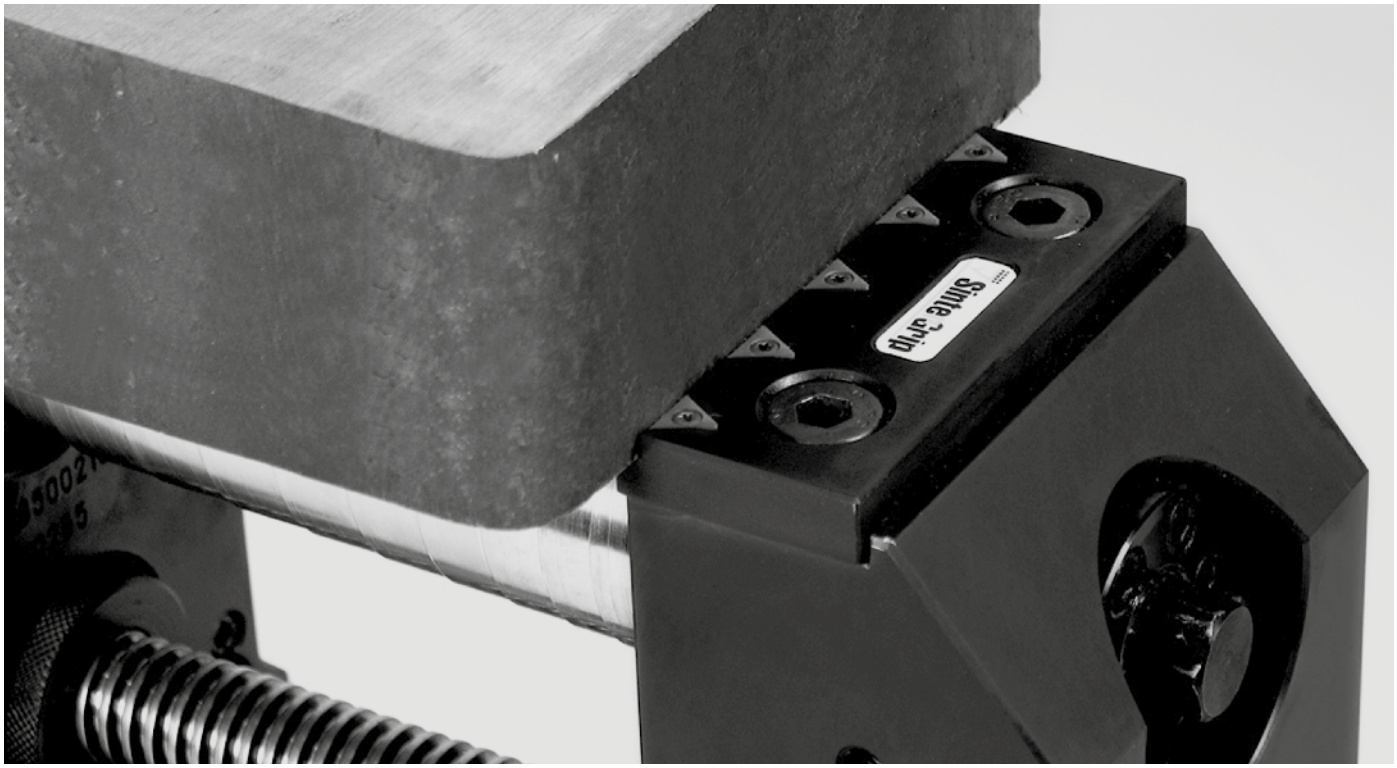
58906324



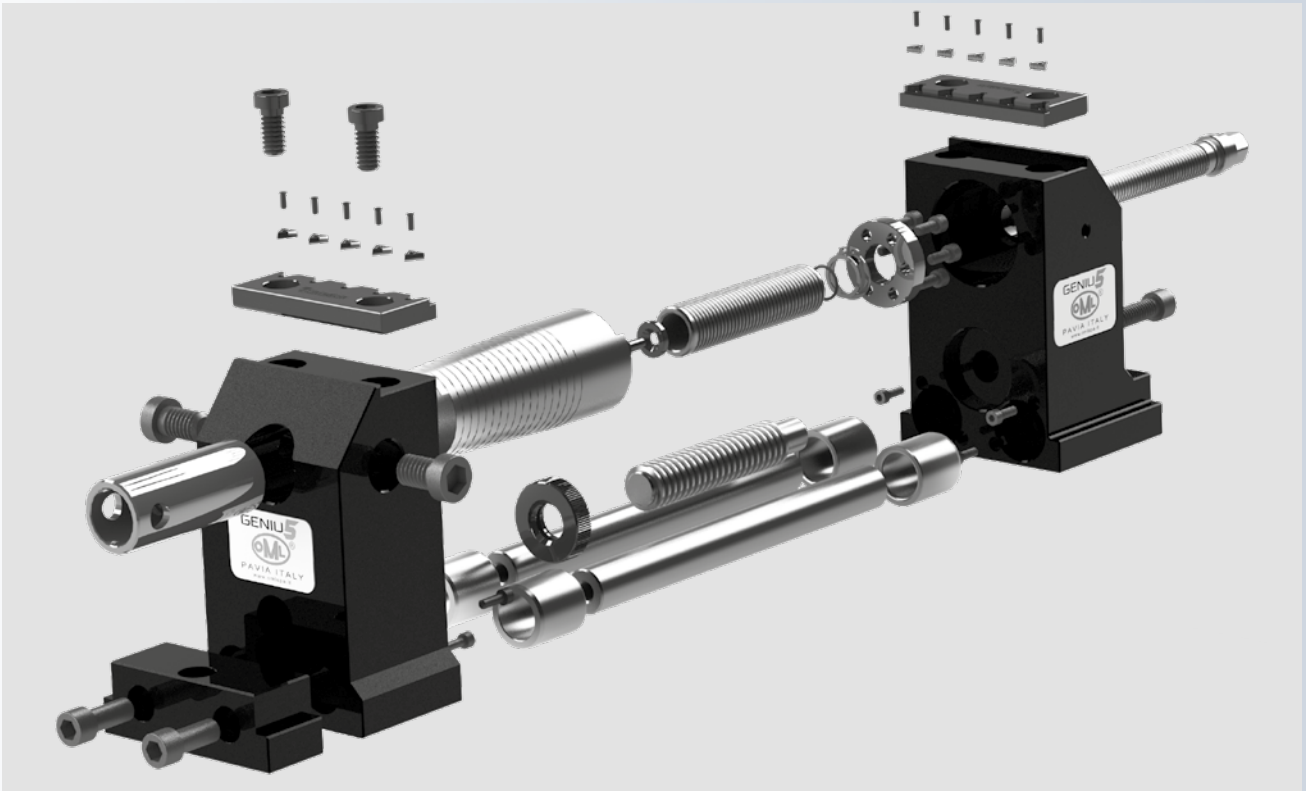
GENIUS

WORKING EXAMPLE WITH GRIPPERS

WORKING EXAMPLE WITH SINTERGRIP



GENIUS5
OML
PAVIA ITALY


GENIUS5
OML
PAVIA ITALY

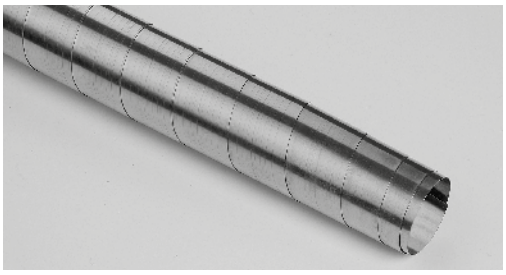
PAIR OF JAWS FOR SINTERGRIP

(SinterGrip inserts: see page S.17)

Id. No.
58451519

CLAMPING KEY

Id. No.
51502910



TELESCOPIC STAINLESS STEEL CARTER

Id. No.
71290218

SPINDLE GROUP

Id. No.
77585010

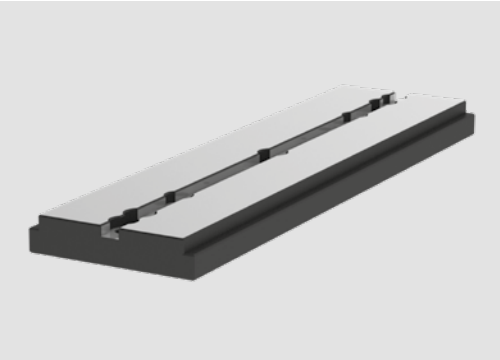
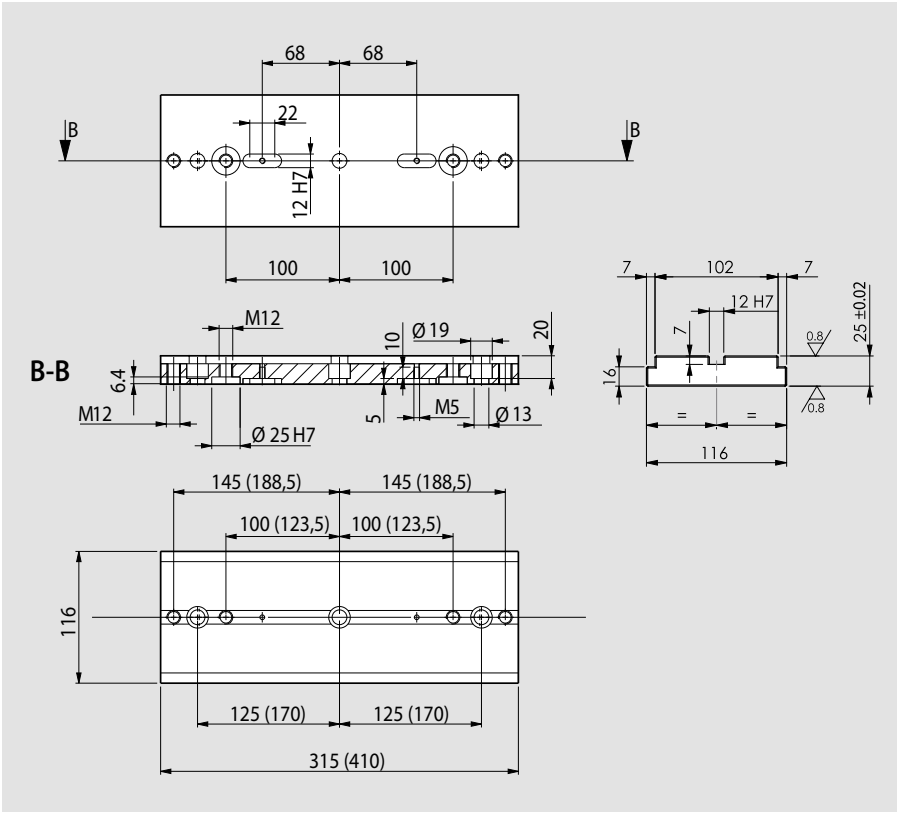
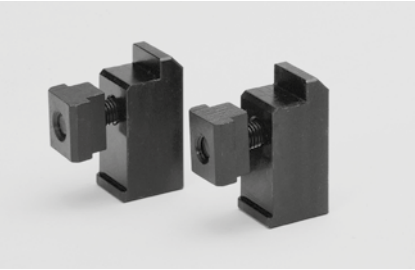


PLATE FOR VISE GENIUS

Type	Id. No.	Weight (Kg)
GENIUS 100	58502010	7
GENIUS 200	(58502020)	9



WORKING EXAMPLE



PAIR OF CLAMPS

Id. No.					
mm 12	mm 14	mm 16	mm 18	mm 20	mm 22
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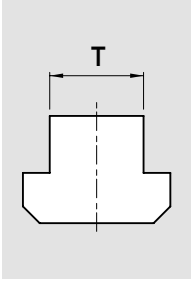

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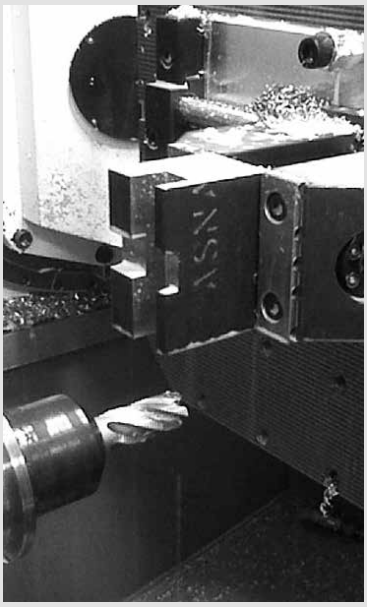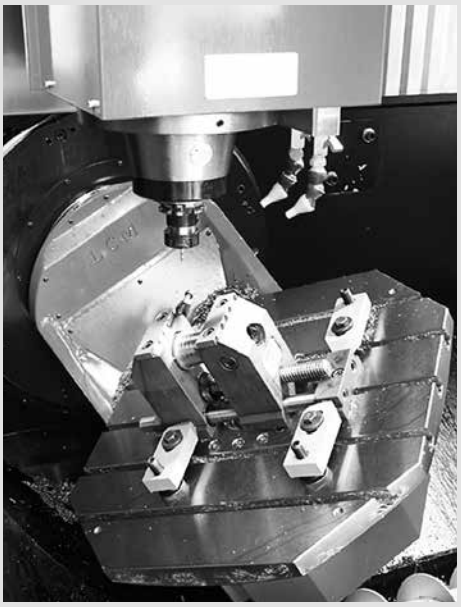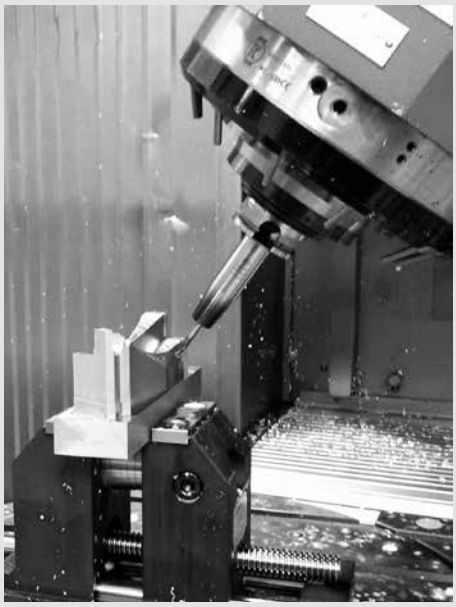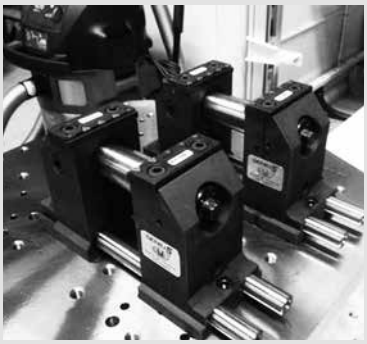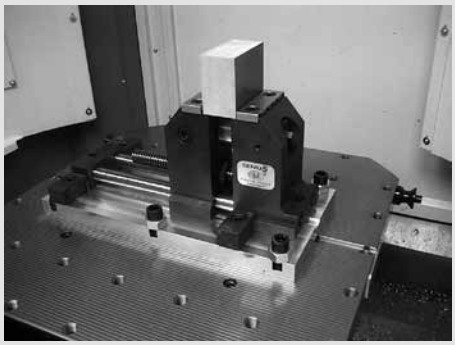
WORKING EXAMPLES